



# Management Information Systems

## Chapter One: **The Information Age**



# Getting Started... some definitions

- ▼ Data
- ▼ Event
- ▼ Sensor
- ▼ Information
- ▼ Intelligence
- ▼ Person-Person (P2P)
- ▼ Person-Machine(P2M)
- ▼ Machine-Machine(M2M)
- ▼ Protocol
- ▼ M-commerce

## **Global M2M:**

Connecting the world's assets

ORBCOMM is the leading provider of global satellite and cellular data communications solutions purpose-built for asset tracking, management and remote control.

[LEARN MORE >](#)





# M-commerce

- ✓ On page 4 of the text it says “Cell technology... the jury is still out...”
- ✓ Answer – the jury is in.. Mobile access to the web is growing extremely fast and becoming one of the prime methods by which people access web content
- ✓ M-commerce means e-commerce in a mobile context

<http://www.witiger.com/ecommerce/mcommerceintro.htm>



# Understanding the need for Information Technology

- ✔ Understanding an Industry Sector
- ✔ Assess the state of competition and industry pressure
- ✔ Determine critical business strategies
- ✔ Develop business processes that support these strategies
- ✔ Align technology tools with these processes





# Information as a Key Resource

- ✔ Business Intelligence
- ✔ Necessary due to the intensity of the competitive environment
- ✔ And the fast paced advances in the technological environment

<http://www.witiger.com/ecommerce/competition.htm>



# Information as a Key Resource

- ✓ Business Intelligence
- ✓ Business Competitors are
  - ✓ Other organizations offering the same product or service now
  - ✓ Other organizations offering *similar* products or services now
  - ✓ Organizations that *could* offer the same or similar products or services in the future
    - not so obvious
    - like Rogers video stores getting into the cell phone market to compete w Bell Mobility
  - ✓ Organizations that *could remove the need* for a product or service we sell
    - not obvious at all, but really important to know who is going to make you extinct
    - like the internet removing the need for encyclopedia's
    - like www.canada411.ca removing the need for "white pages"

<http://www.witiger.com/ecommerce/competition.htm>



# Information as a Key Resource

- ✔ **The possession of information is often considered a critical part of corporate competitiveness**
- ✔ **"Information itself is not so valuable**
- ✔ **- what is valuable is the tools to aggregate the information,**
- ✔ **manipulate it,**
- ✔ **synthesize it so you can draw conclusions which can assist in decisions**

# Understanding the need for Information Technology

- ✔ Understanding an Industry Sector
- ✔ - see Prof. Richardson's YouTube video about the importance of knowing an industry sector
- ✔ It is critical to have a basic understanding of the industry in which the IT is required, in order to assess MIS requirements



[http://www.youtube.com/watch?v=Zh\\_3o1npTEg](http://www.youtube.com/watch?v=Zh_3o1npTEg)



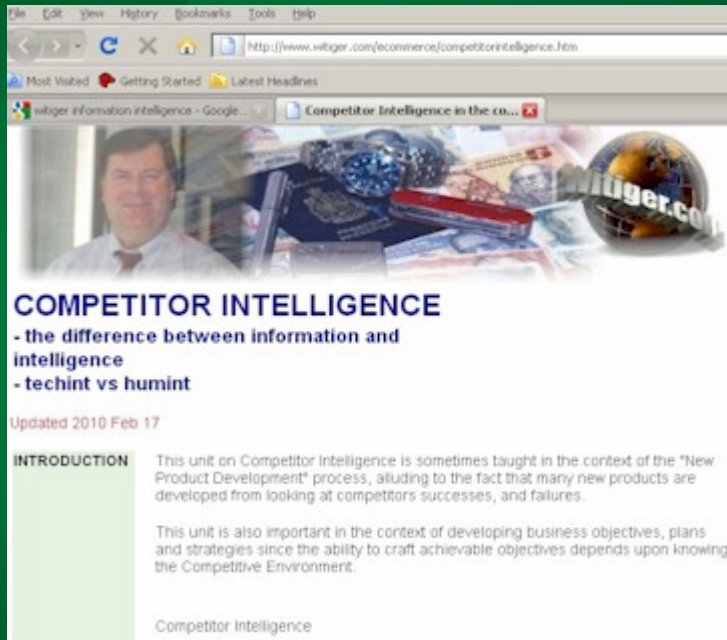
# The Quality of Information



- ✓ Whether or not information is useful and worth the price is based upon its:
  - Timeliness
  - Location
  - Form
  - Validity

Page 9 in the text

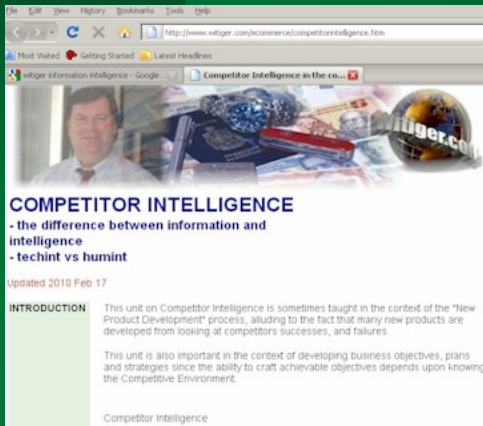
# The Quality of Information



- Usefulness of information
- Click on the screen capture to go to Prof. Richardson's website discussing the difference between Information and Intelligence

<http://www.witiger.com/ecommerce/competitorintelligence.htm>

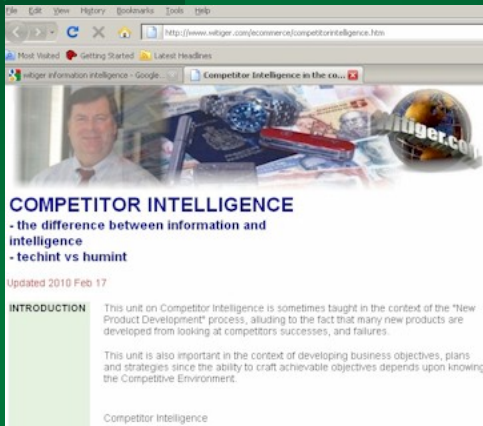
# The Quality of Information



- ✔ Usefulness of information
- ✔ First - keep in mind **not all information is useful**. Sometimes the collection of massive amounts of data has no consequence unless that collection can be done in a way which allows the data to be synthesized, indexed and retrieved - then it becomes information

<http://www.witiger.com/ecommerce/competitorintelligence.htm>

# The Quality of Information



- Usefulness of information
- Secondly - the prime difference between information and intelligence is that **intelligence is essentially information that allows you to make a strategic decision**

<http://www.witiger.com/ecommerce/competitorintelligence.htm>



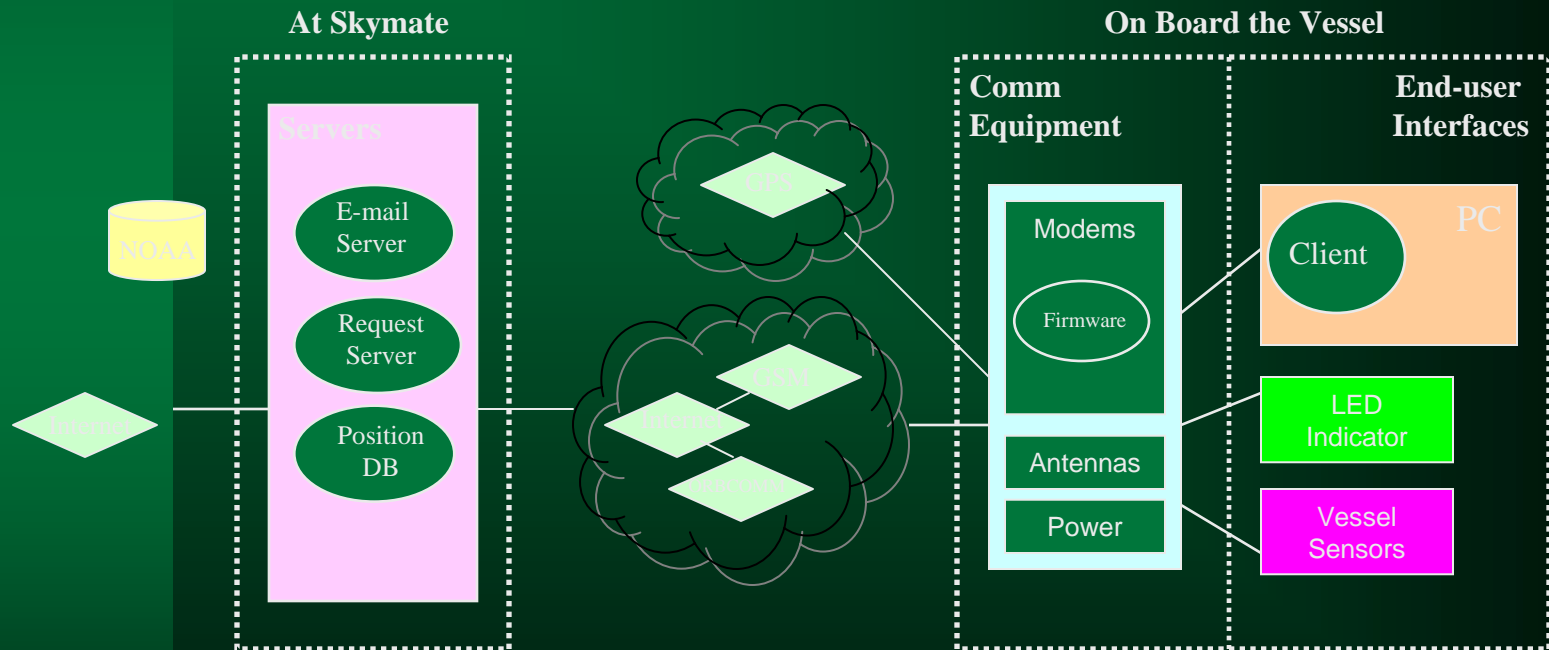
# Information Technology

## ▼ Technology Categories:

- Input Device
- Output Device
- Storage Device
- Central Processing Unit
- Communications Device
- Connection Device

# Technology Categories

## Example: SkyMate Inc





# Strategy and Information Systems

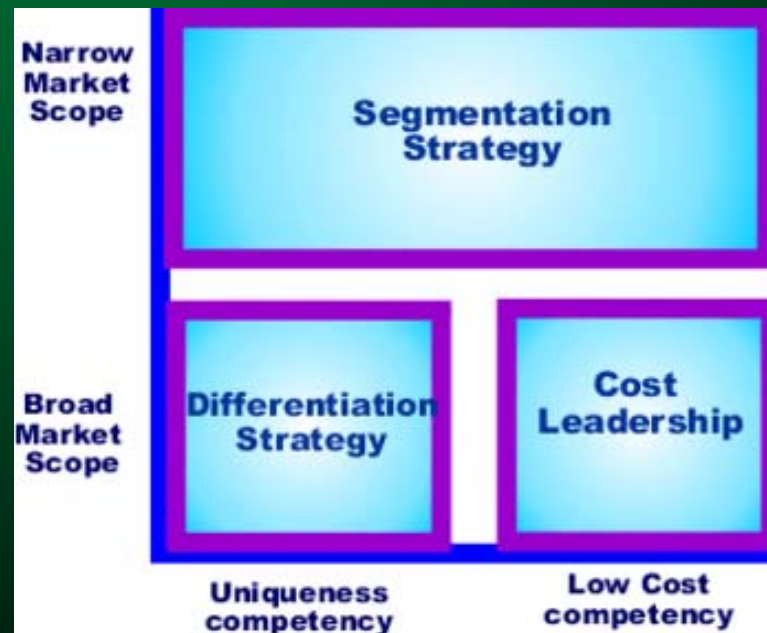
## ▼ Porter's 5 Forces Model:





# Strategy and Information Systems

## ▼ Porter's Three Generic Business Strategies:

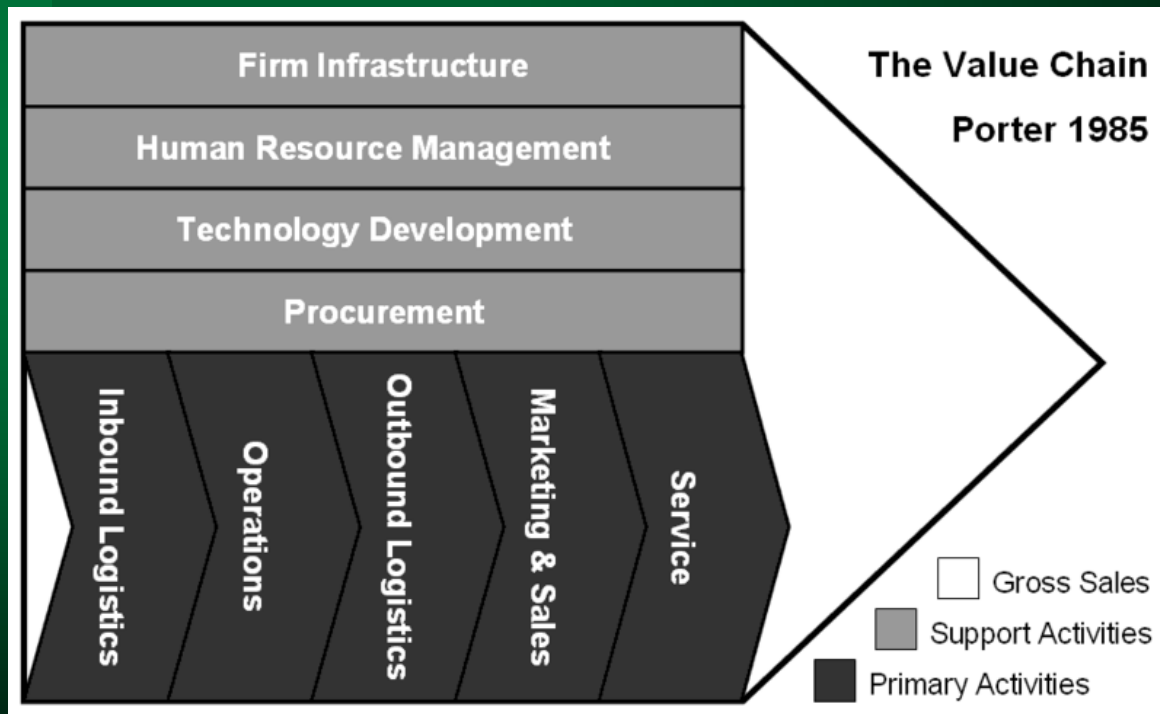






# Strategy and Information Systems

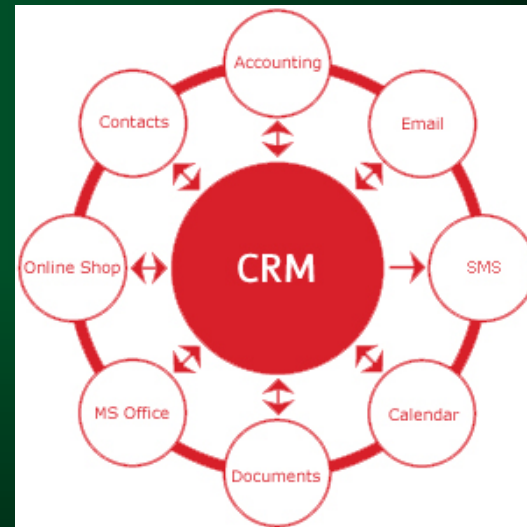
## ▼ The Value Chain:





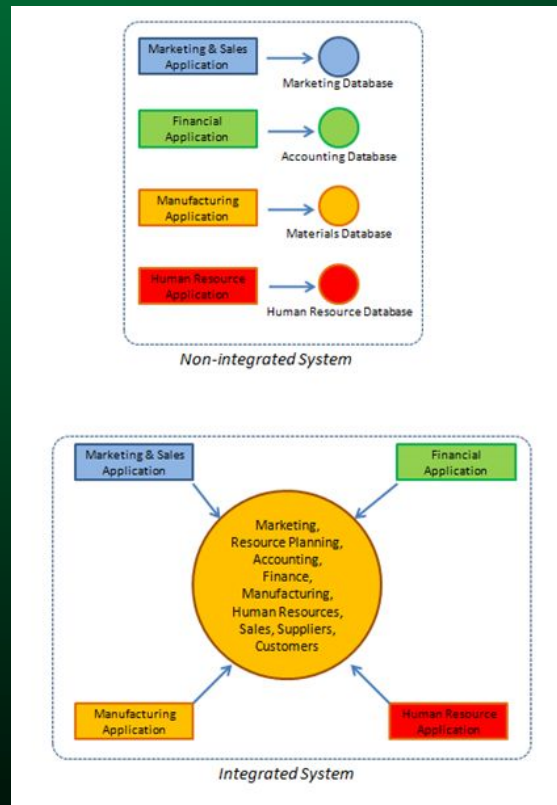
# Business Applications of MIS

- ✔ Customer Relationship
- ✔ Management (CRM):



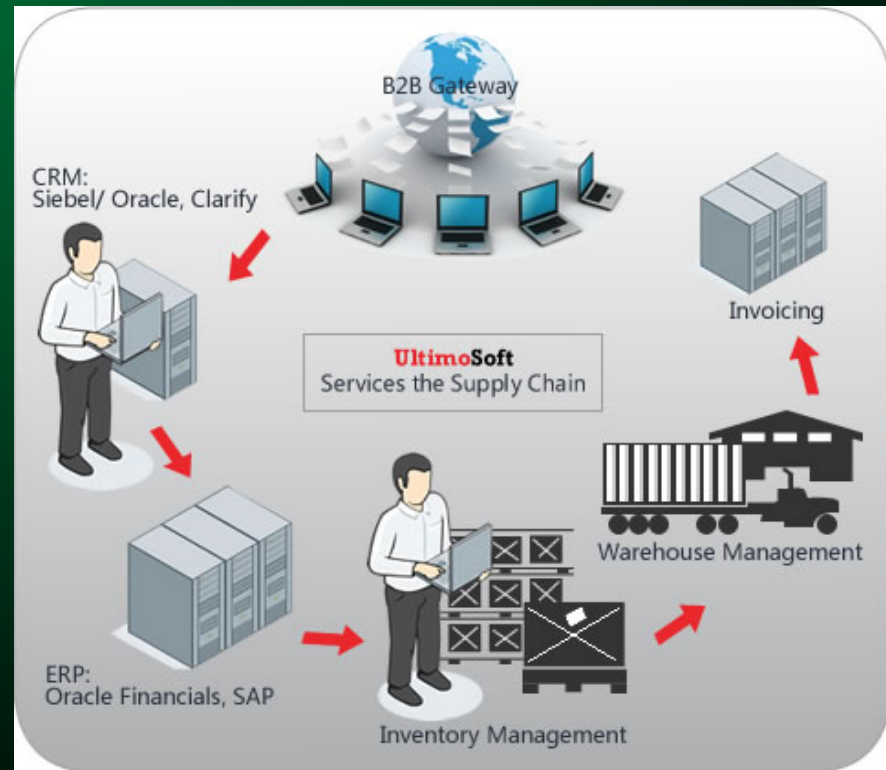
# Business Applications of MIS

## Enterprise Resource Planning:



# Business Applications of MIS

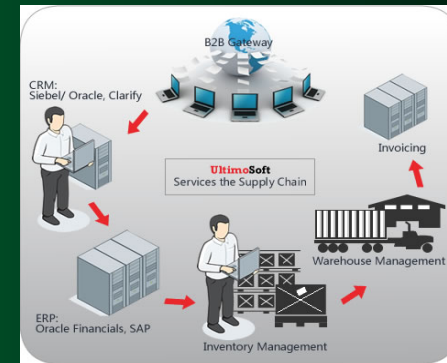
## Supply Chain Management:



# Business Applications of MIS

## Supply Chain Management:

- ✔ "a company's supply chain encompasses the
- ✔ coordination of materials
- ✔ information
- ✔ and funds
- ✔ from the initial raw material supplier to the ultimate customer"





# Business Applications of MIS

## ✔ Supply Chain Management:

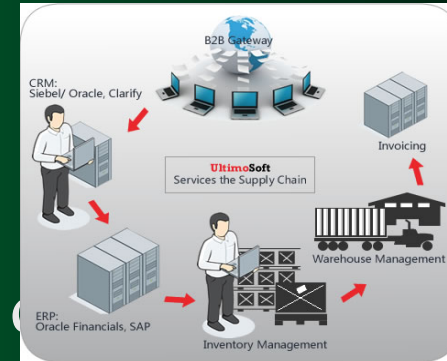
- ✔ "a company's supply chain encompasses the
- ✔ coordination of materials
  - time of the materials arrival
  - location related to the production process
    - warehousing
    - storage
  - packaging of the materials inbound

# Business Applications of MIS

## Supply Chain Management:

- ✔ "a company's supply chain encompasses the
- ✔ information

- information about materials
- price fluctuations
- currency exchange rate considerations



# Business Applications of MIS

## ✓ Supply Chain Management:

### ✓ "the suppliers are broken down into 3 categories (all of which need MIS functions)

#### – third tier supplier - raw materials

- (eg. the polyethylene [plastic] pellets which get heated, then blowmoulded into the shape of the fan blades)
- (eg. the company that takes the raw copper ingots and extrudes them into copper wire, which is used to make the motor)

#### – second tier supplier - subcomponents

- (eg. motor in the fan assembly)

#### – first tier supplier - complete components

- (eg. cooling fan assembly in a computer)

